

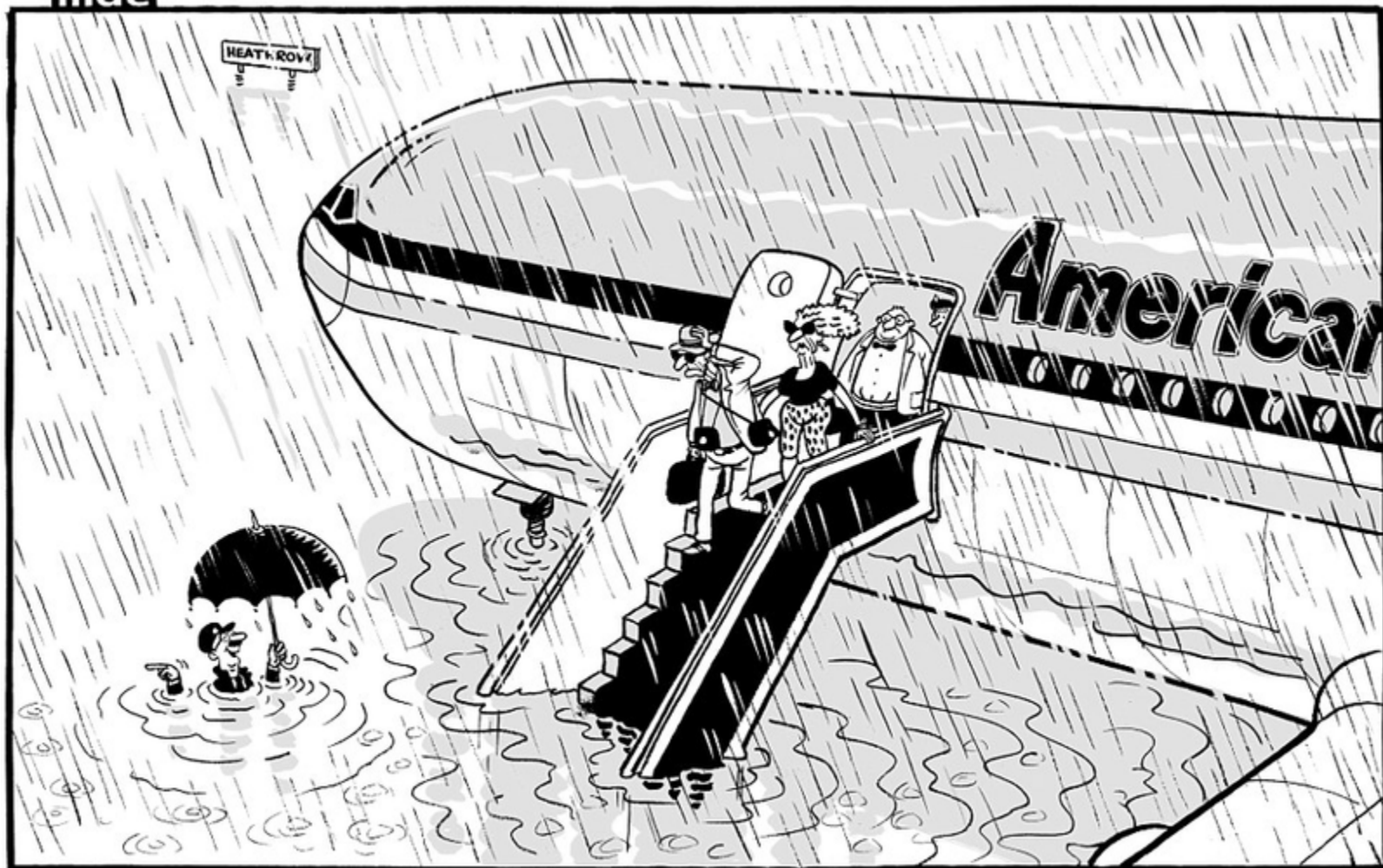
Drenajes Aeroportarios

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Agenda

- Introducción
- Recomendaciones de Diseño
- Instalación y proceso de construcción de sistema de colección.

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'Welcome to the UK, folks. Please swim over to the arrivals building and join the queues.'

Introducción

- Consideraciones importantes en el diseño de colectores pluviales.
 - Seguridad de operación.
 - Daño permanente y erosivo al pavimento y/o a la capa asfáltica.
 - El diseño de colectores pluviales para uso aeroportuario no difiere mucho del diseño municipal.

Recomendaciones de Diseño



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Airport Drainage Design

Date: 8/15/2013

AC No: 150/5320-5D

Initiated by: AAS-100

Change:

- 1. Purpose.** This Advisory Circular (AC) provides guidance for engineers, airport managers, and the public about the design and construction of airport surface storm drainage systems; and subsurface drainage systems for paved runways, taxiways, and aprons.
- 2. Cancellation.** This AC cancels AC 150/5320-5C, Surface Drainage Design, dated September 29, 2006.
- 3. Application.** The guidelines and recommendations contained in this AC are recommended by the Federal Aviation Administration (FAA) for the design and construction of airport surface and subsurface drainage systems. This AC offers general guidance for these systems and is neither binding nor regulatory.

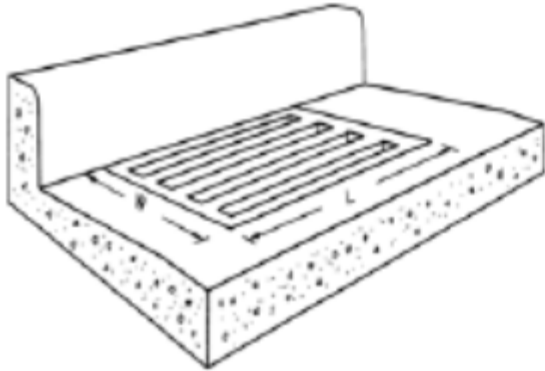
Algunos puntos importantes de esta revisión

- Peligros por la atracción de fauna a las instalaciones, su mitigación y control.
- Consideraciones importantes sobre la selección de materiales de construcción (orden 5300.1F)
- Aprobación para el uso de tubería de plástico para zonas de bajo tránsito.
- Uso autorizado del Item D-701 para tubería en proyectos aeroportuarios.

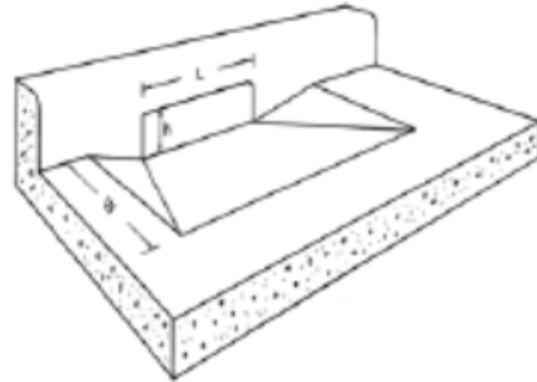
Tipos de tubería aceptados

ASTM C 789 and C 850	Precast Reinforced Concrete Box Sections
ASTM F 667	Large Diameter Corrugated Polyethylene Pipe and Fittings
ASTM F 714	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter
ASTM F 794	Poly (Vinyl Chloride) Ribbed Drain Pipe & Fittings
ASTM F 894	Based on Controlled Inside Diameter Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe
ASTM F 949	Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings
ASTM F 2435	Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F 2562	Steel Reinforced Thermoplastic (HDPE) Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
AASHTO M 190	Bituminous-Coated Corrugated Metal Pipe and Pipe Arches
AASHTO M 190 and M 196	Bituminous-Coated Corrugated Aluminum Alloy Culvert Pipe
AASHTO M 167 and M 243	Bituminous-Coated Structural Plate Pipe, Pipe Arch, and Arches
AASHTO M 219	Aluminum Alloy Structural Plate for Pipe, Pipe Arch, and Arches
ASTM D 3034	Polyvinyl Chloride (PVC) Pipe
AASHTO M 252	Corrugated Polyethylene Drainage Tubing (all types)
AASHTO M 294M	Corrugated Polyethylene Pipe 300 to 1200 mm Diameter (all types)
AASHTO M 304	Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
AASHTO MP-20	Steel Reinforced Polyethylene (PE) Ribbed Pipe

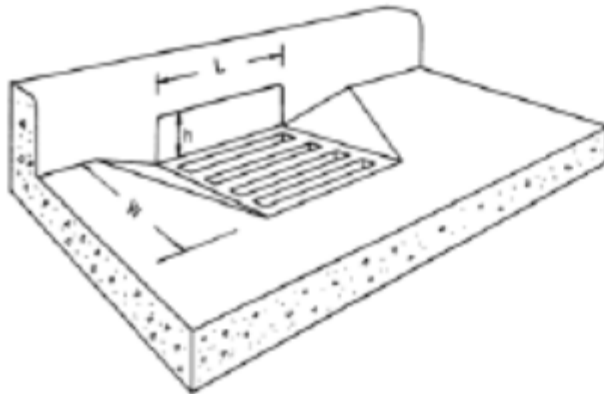
Tipos aceptables de Sumideros



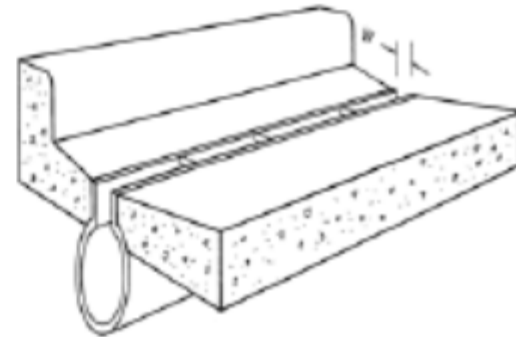
a. Grate



b. Curb-opening Inlet



c. Combination Inlet



d. Slotted Drain Inlet

Tipos de Sumideros

- Sumideros de rejilla
- Entradas de boca de tormenta
- Combinaciones
- Trincheras continuas

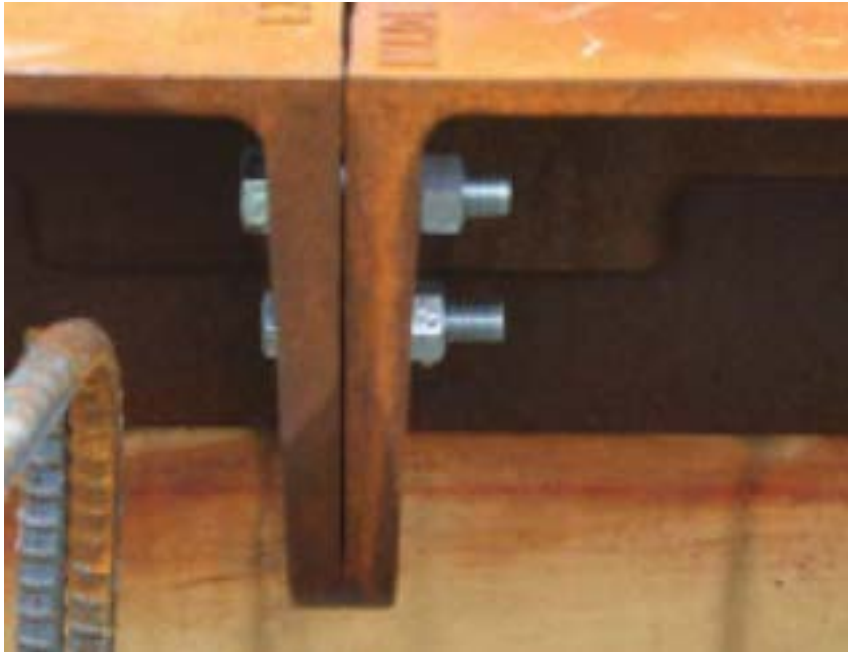
Instalación de Rejillas en el Colector

Paso 1 y 2



Instalación de Rejillas en el Colector

Paso 3



Instalación de Rejillas en el Colector

Paso 4



Instalación de Rejillas en el Colector

Paso 5



Instalación de Rejillas en el Colector

Paso 6



Instalación de Rejillas en el Colector

Paso 7



Instalación de Rejillas del Colector

Paso 7



GRACIAS.